



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,029	06/08/2005	Mauri Hillo	3397-139PUS	8918

27799 7590 11/02/2007  
COHEN, PONTANI, LIEBERMAN & PAVANE  
551 FIFTH AVENUE  
SUITE 1210  
NEW YORK, NY 10176

EXAMINER

PRAKASAM, RAMYA G

ART UNIT	PAPER NUMBER
----------	--------------

3651

MAIL DATE	DELIVERY MODE
-----------	---------------

11/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/538,029

Applicant(s)

HILLO, MAURI

Examiner

Ramya G. Prakasam

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-40 is/are pending in the application.
- 4a) Of the above claim(s) 16, 19, 25 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-15, 17, 18, 20-24, 26, 27 and 29-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendment filed on 8/9/2007 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 21-24, 26, 27, and 29, 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shyr (U.S. Patent No. 5,743,375).

Shyr discloses a conveyor for transporting a roll set, comprising:

- A conveyor belt or chain running about driving and tail pulleys (See Figure 2), the conveyor belt or chain being configured to support a roll set on a top surface of the conveyor belt or chain at a base level in a first section of a transport path between the drive and tail pulleys (See Figure 2);
- An elevating roll assembly at a second section of the transport path between the drive and tail pulleys (72, 76 – See Figure 8) positioned below a portion of the top surface of the conveyor belt or chain and operable to form on the top surface of the conveyor belt or chain an elevation sufficient to separate the rolls of the roll set from each other when the rolls of the roll set are transported by the conveyor belt or chain over the elevation (See Figure 8).

Art Unit: 3651

- Wherein the elevating roll assembly comprises at least one rotatably mounted elevating roll (See Figure 8).
- Wherein the elevating roll assembly comprises two elevating rolls adapted to operate in succession along a travel direction of the conveyor (See Figure 8).
- Wherein the at least one elevating roll is a polygonal elevating roll (See Figures 1 and 8).
- Wherein the at least one elevating roll is a roll rotating eccentrically (See Figure 8).
- A means for adjusting the elevation (See Figure 8 – as the rolls rotate around the sprocket, the elevation is adjusted).
- Wherein the elevating roll comprises two wheels (See Figure 8) and a spacer member (See Figure 7 – connection between the two wheels), one of the two wheels being on each side of a longitudinal center line of the conveyor belt or chain, the two wheels being rotatably supported with as the spacer member mounted therebetween (See Figures 7 and 8).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-15, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr in view of Ruohio (U.S. Patent No. 5,655,425).

Art Unit: 3651

Shyr discloses a method for separating articles traveling on a conveyor from each other, the conveyor comprising a conveyor belt or chain running about driving and tail pulleys (See Figure 2), comprising:

- Transporting the article on a top surface of said conveyor belt or chain at a base level in a first section of a transport path between the driving and tail pulleys (See Column 2, lines 16-24);
- Forming onto the top surface of the conveyor belt or chain at a second section of the transport path between the driving and tail pulleys an elevation above the base level to separate the rolls from each other when the rolls of the roll set are transported over the elevation (See Figure 8).
- Wherein the elevation is formed with an elevating roll assembly adapted to operate below the top surface of the conveyor belt or chain and comprising at least one rotating elevating roll (See Figure 8).
- Wherein a height of elevation between the top surface of a base level of the conveyor belt or chain and a top level of the elevation is adjusted during operation of the conveyor, the base level of the conveyor being a level of the conveyor upstream of the elevation (See Figure 8 – as the rolls rotate around the sprocket, the elevation is adjusted).
- Wherein at least one of the at least one elevating roll is a polygonal elevating roll (See Figures 1 and 8).
- Wherein at least one of the at least one elevating roll is a roll rotating eccentrically (See Figure 8).

Shyr, however, does not explicitly disclose that the articles be rolls in a roll set. Ruohio discloses the transport of rolls in a roll set for the purpose of manufacturing rolls at paper mills (See Column 1, lines 14-50). It would have been obvious to utilize the method in Shyr to transport rolls in a rolls set for the purpose of manufacturing rolls at paper mills.

5. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr in view of Santandrea (U.S. Patent No. 5,060,780).

Shyr discloses all claimed limitations (See Above), except for a conveyor wherein a height difference between the top surface of a base level of the conveyor and the top level of the conveyor is 2 to 6mm. Santandrea discloses a conveyor wherein a height difference between the top surface of a base level of the conveyor and the top level of the conveyor is 2 to 6mm (See Column 23, lines 3-17) for the purpose of creating a small enough distance such that waste materials would not be found between the conveyed item and the base of the conveyor (See Column 23, lines 17-22). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Shyr by utilizing a a conveyor wherein a height difference between the top surface of a base level of the conveyor and the top level of the conveyor is 2 to 6mm for the purpose of creating a small enough distance such that waste materials would not be found between the conveyed item and the base of the conveyor.

6. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr.

Shyr discloses all claimed limitations, except that the length of the elevation explicitly be is 150 to 250mm. A change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It would be obvious to change the length of elevation to 150 to 250mm in order to change the design of the conveyor.

Art Unit: 3651

7. Claims 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr in view of Santandrea.

Shyr in view of Santandrea discloses all claimed limitations, except that the length of the elevation explicitly be is 150 to 250mm. A change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It would be obvious to change the length of elevation to 150 to 250mm in order to change the design of the conveyor.

#### ***Response to Arguments***

8. Applicant's arguments filed on 8/9/2007 have been fully considered but they are not persuasive.

9. With regards to applicant's argument that Shyr fails to disclose driving and tail pulleys, the chain is clearly running about the sprockets (See Figure 2). The sprockets are fit to accept the chain, and as seen in Figure 7, the chain runs about the two pulleys. Therefore this limitation is disclosed.

10. With regards to applicant's argument that the chain fails to support the roll set, Column 2, lines 62-63 clearly state that the article (in this case the roll set) will be carried by the side roller chain 71, therefore this limitation is in fact disclosed.

11. For the foregoing reasons, the claims stand rejected.

#### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3651

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramya G. Prakasam whose telephone number is (571) 272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

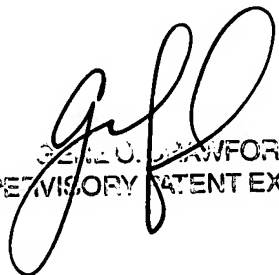


Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/29/2007

RGP

  
GERALD O. CRAWFORD  
SUPERVISORY PATENT EXAMINER